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C. C. FREDERICK, B. S., M. D.,

BUFFALO, N. Y.,

Adjunct Professor of Obstetrics, Medical Department of Niagara University; Obstetrician and Gynæcologist, Buffalo Woman's Hospital; Obstetrician, Buffalo Widows' and Infants' Asylum; Gynæcologist to the Erie County Hospital.

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REMARKS ON INTRA-UTERINE IRRIGATION IN THE TREATMENT OF FEVERS OCCURRING DURING THE PUERPERIUM.*

BY C. C. FREDERICK, B. S., M. D., BUFFALO, N. Y.,

Adjunct Professor of Obstetrics, Medical Department of Niagara University; Obstetrician and Gynæcologist, Buffalo Woman's Hospital; Obstetrician, Buffalo Widows' and Infants' Asylum; Gynæcologist to the Erie County Hospital.

When intra-uterine irrigation was first introduced into modern medicine, the hope was undoubtedly aroused that it was to make certain the successful treatment of that scourge which for years had closed lying-in hospitals and decimated the population of every community. It was enthusiastically received because it so often did good and saved lives. In consequence of its enthusiastic reception it was abused. It was resorted to in all forms of febrile disturbance post-partum; it was used when there were no good indications for its employment.

Most things potent for good are also potent for evil when misapplied. So it is in this case due to the want of knowledge and experience in its correct use, and the proper indications for its application. Antiseptic solutions of too great strength were at first in vogue, and the patient, in addition to her febrile disturbance, sometimes had to combat a toxæmia from the chemical used in the douche; or her fever was intensified by the shock of an unnecessary irrigation perhaps improperly given.

These experiences naturally led many conservative men, and especially those older in the profession, to a certain disbelief or want of confidence in the procedure.

In fevers of puerperal women we have no right to jump at the conclusion that because the fever comes on during the puerperal period it is a puerperal septicæmia. By reference to several hundred fever charts of puerperal women, and recalling many more cases in my experience before I kept a record of temperatures, I find that it is not

* Read before the Western Branch of the New York State Medical Association.

uncommon to have a temperature jump several degrees above normal with no apparent assignable cause, and as quickly drop again to normal without any special treatment. I have seen purely nervous causes, such as worry, family troubles, etc., run a temperature up for several days. Fevers of a distinctly periodic type, showing their malarial origin, not infrequently complicate the puerperium.

Fever is not the only factor on which to establish a diagnosis. While I do not wish to consume much time on the question of diagnosis, as a primary step it is the most important. On it rests the treatment. Here the lines are so closely defined that to err for several days may sacrifice a life.

There recently occurred in this city an example of this. The case was diagnosticated as hepatic abscess, malignant ulcerative endocarditis, and I know not what else, by the attending physician and several consultants. She died after three or four weeks' illness. The autopsy showed a deep slough in the uterine wall as large as a silver half-dollar piece, an abscess in one broad ligament (not in the tube or ovary), and infarcts in the kidneys and lungs. In this case, I am told, nothing about the lochial discharge led to a suspicion of the nature of the intra-uterine lesion. In several of the worst cases of puerperal septicæmia which I have seen the lochia gave no evidence, by the quantity, appearance, or odor, of the conditions which were found inside the uterus. The absence of putrid lochia therefore ought never to influence the diagnosis or treatment.

Pain is not a prominent symptom unless there be inflammation of the pelvic peritonæum or a salpingitis. Tenderness on pressure over the uterus and ovarian regions, however, is a quite common symptom, as is also enlargement of the uterus. If the lesion be intra-uterine the uterus will always be much deeper than it ought for the period of time that has elapsed since labor. If the case be one of pseudo-membranous diphtheritis confined to the cervix and vaginal portion, swelling of the uterus and tenderness may also be absent, in which event diagnosis can only be made by ocular inspection of the cervix through a speculum. Unless there be some peritonitis, tympany will be absent. The diagnosis is therefore narrowed down to the existence of fever for which there is no other assignable cause ; either swelling of the uterus or tenderness of the pelvic organs, or both. Speculum examination (which should always be made) will show a pseudo-membranous deposit on the cervix, or abrasions in the vaginal wall and vulva, or a patulous os and swollen cervix, above which, on passing the sound, will be found a deep, flabby, swollen, and tender uterus.

A large blunt curette drawn lightly over the uterine surface will demonstrate the condition of the cavity and the character of its secretions and contents. Here also I should like to emphasize a point in diagnosis which is frequently overlooked—viz., that a transient septic fever after labor is not infrequently due to septic processes occurring in lacerations of the vaginal walls and vulva.

If a febrile attack during the puerperal period can be assigned to any known cause, and septic absorption from the uterus or vagina excluded, manifestly intra-uterine irrigation is not indicated; it is worse than useless—it is positively harmful. Intra-uterine irrigation does not constitute the sum total of the treatment of puerperal septicæmia. Those who depend upon it alone will be disappointed in a goodly proportion of their cases. Washing out the uterus is only one step, and a very valuable one, in the vast majority of cases of puerperal septic infection. It is simply applying to the uterine cavity the surgical principle of irrigation and drainage of septic cavities. But what surgeon would be content to simply wash out a septic cavity if there probably existed in the cavity materials which the current of water would not wash away. A uterus which has adhering to its walls septic tenacious mucus or rotting tufts of placenta or decidua can not be cleansed by a stream of water running in and out, however strongly antiseptic the solution may be. The use of a curette to loosen and remove these masses from the walls and then a stream to wash them out, even if it be only plain sterilized water, is much more effective than irrigation alone could ever be.

There has been a great deal written against the practice of using the curette post-partum at term. It is effective—yes, positively necessary to use it after abortion with retention of secundines. With due deference to all who have advised against its use at full term, I must say that it is as harmless then as at any time, and is as positively useful and effective. It is not only then an instrument for treatment, but, as will be seen above, it is also useful as an instrument of diagnosis. It is seldom necessary to use a sharp curette. A dull curette with a large fenestrum, the fenestrated portion making nearly a right angle with the shank of the instrument, has always been the most effective in my experience in showing the presence of masses, adherent to the uterine wall. It also removes adherent mucus, membranes, and *débris* most thoroughly with little force. At times it is necessary to use the sharp curette but very infrequently. Many more lives may be saved in much shorter time and intra-uterine irrigation made more effectual by combining with its use in most cases a judicious use of the dull or

half-sharp curette. Allow me to cite the history of a case recently seen in consultation with one of the ablest physicians of this city:

Mrs. B., aged thirty, primipara, had been delivered ten days when I first saw her. On the fifth day she began to have fever which rapidly rose to 103° F. and continued between 103° F. and 105° F., pulse 120 to 160. Temperature was 105.5° at my first visit. She was delirious, her pulse was rapid and feeble, and her skin was bathed in profuse perspiration. The lochia showed no sign of intra-uterine trouble; it was not profuse nor was it offensive. The belly was swollen and tender; the fundus uteri could be felt at the level of the umbilicus and was exquisitely tender on pressure, as were also both iliac fossæ. The uterine cavity had not been invaded, because the attending physician had used washing in other cases without benefit, and therefore had not used it in this case.

I placed the patient on a table in the lithotomy position with a good light, and put in a speculum. Catching the cervix with a double tenaculum to steady the uterus, the sound was found to enter ten inches before reaching the fundus. I used a dull curette, as previously described, and removed, with the minimum of force, from the interior of the uterus nearly a saucerful of *débris*—a large proportion of which looked like new growth—a pseudo-membrane. The uterus was then washed out and a twenty-grain iodoform suppository carried to the fundus. In eighteen hours her uterus was again irrigated. In twenty-four hours I again repeated the curettage and irrigation. The temperature and pulse began to fall, the uterus began to grow smaller. The uterus was curetted only twice; the irrigation was done once or twice daily for four days. The patient's temperature was normal within one week from beginning of treatment. The attending physician was astonished at the rapidity of her recovery, stating that he had lost several patients, and expressed the belief that they might all have lived had he combined with uterine irrigation curettage.

This is a sample case of many that are constantly occurring in every community, and although many are benefited by irrigation alone, I believe that too many physicians have been deterred from using the curette because so much has been written against its use post-partum.

Harm may be done if too sharp a curette is used too forcibly. If a physician has not confidence in his ability to perform curettage without fear of doing harm, he should remember that there are others whose ability to do it for him is unquestioned.

Puerperal diphtheritis, characterized by a pseudo-membranous

deposit which usually first appears in the cervical canal and vaginal portion of the cervix, is not benefited in the least by douching. The curette, a fifty-per-cent. solution of chloride of zinc applied to the diseased surface, and free douching with solution of permanganate of potassium or peroxide of hydrogen, are the only means which will reach these otherwise rapidly fatal cases.

Puerperal sepsis, which has its origin in old deposits of pus in appendages, can not, of course, be treated successfully by any other means than by removing the focus of infection.

The toxæmia in all cases of puerperal infection is probably at first entirely from absorption from vaginal tears or from the uterine cavity, and it can be most promptly and successfully combated.

Metritis, salpingitis, oöphoritis, and pelvic peritonitis soon develop in most cases. Centers of infection then originate in the uterine veins, lymphatics, the tubes and ovaries, where local treatment can do little or no good.

The cases which are allowed to run untreated for days, till general systemic infection has taken place, can not hope to be benefited by any local measures. The point I wish most forcibly to impress is the necessity of treating these cases early. Intra-uterine irrigation to be effective must be properly done. Intra-uterine irrigation with the patient in bed—as I have seen it done on a bedpan, the instrument a gum-elastic catheter—is only an attempt at it. It is no more than a vaginal douche, and a poor one at that.

I wish to call especial attention to the technique of the procedure. To wash out a uterus properly, the patient should be placed on a table, in a good light, with assistants to hold her legs and to handle the instruments. The results to be attained are worth the effort to do it thoroughly. It should therefore be done as systematically and with the same preparations that any operation on the cervix or perinæum would demand. By placing the patient in the lithotomy position and by bringing the cervix into view with some form of speculum or double retractors, and grasped and steadied by a single or double tenaculum, the patient is subjected to less pain, the parts can be better inspected, the tube and curette can be more easily passed, the return flow of the douche from the uterine cavity is favored, the *débris* from curetting is more thoroughly removed, the time required is shorter, and consequently less tiresome for the patient, it is easier for the operator, and in every way more effectual.

It matters little what the irrigating solution is so long as it is itself aseptic. Care must be taken in using corrosive-sublimate solu-

tions, especially in blonde women, who are very susceptible to its toxic effects. A curved, hard rubber intra-uterine tube possesses advantages over tubes made from any other material, because it can be sterilized by boiling, it is not breakable, and the curve can be changed to suit each case by immersion in boiling water.

I believe that intra-uterine irrigation alone has disappointed many able practitioners for some of the reasons embodied in this paper.

As one of the steps in the treatment of sepsis of intra-uterine origin, nothing can take its place. I think that the experience of those who see many of these cases in consultation will coincide with this statement. It is hoped that this paper may do something toward helping to establish this important procedure, with proper limitations, at its just place in the esteem of all doubting medical men.

64 Richmond Avenue, *August* 25, 1894.